
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Ykfp Management, Data And Habitat

BPA project number: 8812025

Contract renewal date (mm/yyyy): 1/2000

☐ Multiple actions?

Business name of agency, institution or organization requesting funding

Yakama Indian Nation

Business acronym (if appropriate)

YIN

Proposal contact person or principal investigator:

Name Melvin R. Sampson

Mailing Address P.O. Box 151

City, ST Zip Toppenish, WA 98948-0151

Phone 509-865-6262

Fax 509-865-6293

Email address mel@yakama.com

NPPC Program Measure Number(s) which this project addresses

7.4K, 7.1A, 7.1B, 7.1C, 7.1D, 7.1F, 7.2D, 7.3B, 7.4A, 7.6A, 7.6A.2, 7.6B.3, 7.6B.6, 7.6D, 7.7, 7.8E

FWS/NMFS Biological Opinion Number(s) which this project addresses

NMFS Biological Opinion for the 1995 to 1998 Hatchery Operations in the Columbia River Basin (NMFS 1995a), BPA's Biological Assessment of 1997-2001 Hatchery Operations of the Proposed Cle Elum Hatchery, December 1995 (BPA 1995). NMFS letter dated 4/1/96

Other planning document references

1. Yakima Fisheries Project Final Environmental Impact Statement (1/96)
 2. Yakima Fisheries Project Spring Chinook Supplementation Monitoring Plan (Busack et al, 1997).
 3. Wy Kan Ush Me Wa Kush Wit, Vol 1: pp 5A-2; 5B-13 through 5B-12; Vol 2: pp57 &59.
 4. NPPC Yakima and Klickitat Subbasin Plans
 5. The ISRG's Return to the River (Williams et al. 1996) -- Restoration of Salmonid Fishes in the Columbia River Ecosystem: Chapter 2.
-

Short description

This proposal describes the YKFP's management and administrative support requirements for Project operations in the Yakima and Klickitat River basins.

Target species

Yakima and Klickitat Subbasin spring chinook, fall chinook, and coho. Steelhead are not being produced at this time, but are being reconditioned at the Prosser Fish Facility.

Section 2. Sorting and evaluation

Subbasin

Yakima and Klickitat Subbasins

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input checked="" type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description
20510	Yakima/Klickitat Fisheries Project
9701725	YKFP, Operations & Maintenance
8811525	YKFP, Design and Construction
9506325	YKFP, Monitoring & Evaluation

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9105500	Supplementation Fish Quality (Yakima)	Unknown -- study not completed at this time.
9105700	Yakima Phase 2 Screen Fabrication	Basin Passage
9200900	Yakima Screens-Phase II O & M	Basin Passage
9506404	Policy/Tech Involvement/Planning YKFP for WDFW	Provides for WDFW participation in YKFP management
9603501	Satus Watershed Restoration	Yakima River Tributary
9705100	Yakima Basin Side Channels	Rearing habitat
9705600	Lower Klick R. Riparian & Habitat Enhancement	Rearing/spawning
9803400	Restablish safe access into tribs. of Yakima Basin	Passage/rearing
9803300	Restore Upper Toppenish Creek Watershed	Yak R. Trib/water quality
9901300	Ahtanum Creek Watershed Assessment	Yak R. Tributary

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1997	Acting as Lead Agency, YIN implemented YKFP	

	operations; managed and directed all YIN management, administrative, science and technical personnel; participated in all activities affecting Project management and administration.	
1997	As co-managers, the YIN and WDFW developed project policy and implemented planning functions	
1997	YIN and WDFW -- organized and ensured successful completion of Project Annual Review	
1997	YIN and WDFW -- coordinated all environmental compliance activities with BPA	
1997	YIN and WDFW -- managed and directed all sub-contractors providing services to the Project	
1998	YIN and WDFW performed all management activities listed above	

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Develop and implement Project policy and planning functions and provide administrative support for YKFP	a	YIN and WDFW will participate in all Policy Group meetings and develop Project policy.
		b	YIN will manage and implement Project monitoring & evaluation; operations & maintenance; and design and construction activities.
		c	YIN and WDFW will complete Project reporting requirements and ensure Project financial accountability.
		d	YIN will manage and direct all YIN management, administrative, science and technical personnel.
		e	WDFW will manage and direct all WDFW participating in Project activities.
2	Implement and Maintain a Data Information System for YKFP	a	YKFP will design/maintain Data Info System and develop a 5 year Information System Resource Plan.
		b	YIN will employ the services of a qualified data Manager:
3	Coordinate a planning process through the YKFP Policy Group, utilizing the concepts of adaptive management.	a	YIN and WDFW will perform Project planning functions;
		b	YIN and WDFW will oversee the Project's specific initiatives: Project Management Plan; Planning Status Report; Uncertainty Resolution Plan and Annual Operation Plan.
4	Plan/Facilitate Project Annual Review	a	Coordinate with WDFW in planning Project Annual Review (PAR), which will utilize scientific peer review.
		b	Analyze PAR results for future consideration into YKFP Objectives and Plans.
5	Coordinate the services of a	a	STAC will review all technical/scientific

	Science/Technical Advisory Committee (STAC).		information and tasks, and will provide recommendations to Policy Group for implementation.
6	Coordinate, in the Yakima/Klickitat River Basins, water and habitat planning/development initiatives by various agencies, groups and committees.	a	YKFP will maintain a presence at various basin initiatives relative to all water and habitat matters that will impact the YKFP.

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	1/2000	12/2000			58.00%
2	1/2000	12/2000			16.00%
3	1/2000	12/2000			12.00%
4	1/2000	12/2000			2.00%
5	1/2000	12/2000			8.00%
6	1/2000	12/2000			4.00%
				Total	100.00%

Schedule constraints

Potential constraints for full implementation of the fall chinook and coho programs will be dictated by compliance to the NEPA review.

Completion date

2048

Section 5. Budget

FY99 project budget (BPA obligated): \$750,000

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel		%36	273,635
Fringe benefits		%7	49,486
Supplies, materials, non-expendable property		%7	54,271
Operations & maintenance		%6	46,935
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		%0	
NEPA costs		%0	
Construction-related support		%0	
PIT tags	# of tags:	%0	
Travel		%3	25,176
Indirect costs		%14	105,632
Subcontractor		%26	194,865
Other		%0	

TOTAL BPA FY2000 BUDGET REQUEST	\$750,000
--	------------------

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
		%0	
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$750,000

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$760,000	\$770,000	\$780,000	\$790,000

Section 6. References

Watershed?	Reference
<input type="checkbox"/>	Project Management Plan
<input type="checkbox"/>	Project Status Report, Upper Yakima Spring Chinook Salmon (YKFP, 1995)
<input type="checkbox"/>	Project Status Report, Yakima River Fall Chinook Salmon (YKFP, 1994, revision in review)
<input type="checkbox"/>	Project Status Report, Yakima River Coho Salmon (YKFP, 1995, revision in review)
<input type="checkbox"/>	Uncertainty Resolution Plan (YKFP, 1993)
<input type="checkbox"/>	Annual Operations Plan, CESRF (YKFP, 1997 & 1998)
<input type="checkbox"/>	Spring Chinook Supplementation Monitoring Plan (Busack et al, 1997)

PART II - NARRATIVE

Section 7. Abstract

The “YKFP – Management, Data, and Habitat” *sub-proposal* provides for the management of the YKFP. The project’s co-managers, YIN and WDFW, are responsible for policy development and planning. Experience has demonstrated the vital need for timely policy decisions and appropriate administrative support. The YIN serves as the project’s “Lead Agency”. In this role, the YIN is responsible for the implementing project operations, including managing and directing all project employees. Administrative support for carrying out Project operations is provided by the YIN.

The YKFP Project also needs an encompassing system for gathering, synthesizing, cataloguing and disseminating data and information. The data/information system is essential to meet internal project purposes, and for making the information available to other scientists and the general public.

The YKFP will continue to monitor and address habitat conditions, water issues, and other environmental actions influencing the YKFP objectives and their implementation. These issues must be addressed consistent with YKFP goals and objectives. This Management *sub-proposal* addresses the manner in which the habitat, water and environmental issues are analyzed and incorporated into the project’s decision-making process.

The “YKFP – Management, Data, and Habitat” *sub-proposal* provides for the full coordination of the YKFP, including the responsibilities that accompany the role of “Lead Agency”. As referenced, the Washington State Department of Fish and Wildlife, as co-managers of the Project, participate through Project #9506404, Policy/Technical Involvement/Planning, YKFP and sub-contracts under Project #95-063-25, “YKFP-Monitoring and Evaluation”.

Section 8. Project description

a. Technical and/or scientific background

Efficient and effective Project management is critical to the success of the YKFP. The management activities of Project’s co-managers, YIN and WDFW, are necessary to ensure that the Project achieves its core objectives, which are:

- Test the hypothesis that new supplementation techniques can be used in the Yakima and Klickitat River basins to increase natural production and to improve harvest opportunities, while maintaining the long-term genetic fitness of the wild and native salmonid populations and keeping adverse ecological interactions within acceptable limits;
- Attain knowledge about the use of supplementation, so that it may be used to mitigate effects on anadromous fisheries throughout the Columbia River Basin;

Supplementation is defined as the utilization of artificial propagation in an attempt to maintain or increase natural production while maintaining long-term fitness of the target population and while keeping ecological and genetic impacts on nontarget species within specified limits (RASP 1991). As applied by the YKFP, its goal (as distinct from conventional hatchery practices) is to increase the numbers of naturally spawning fish in the Yakima and Klickitat basins. Its ultimate goal is to produce enough naturally spawning fish with a high enough survival rate to be able to phase out artificial propagation.

Current YKFP operations have been designed to test the principles of supplementation. The Project’s experimental design (see YKFP M&E sub-proposal #9506325) has focused on the following critical uncertainties affecting supplementation:

1. the survival and reproductive success of hatchery fish after release from the hatchery;
2. the impacts of hatchery fish as they interact with non-target species and stocks; and,
3. the effects of supplementation on the long-term genetic fitness of fish stocks.

Through this sub-proposal, Project co-managers, YIN and WDFW, will develop policy and science, and implement the YKFP’s experimental design. All YIN management activities are contained in this *sub-proposal*. WDFW management activities are referenced in this *sub-proposal*, but are submitted as a separate proposal.

The reader is directed to other divisions of this Umbrella, specifically: YKFP-Management, Data and Habitat”, Project #88-120-25, “YKFP-Monitoring and Evaluation”, Project #95-063-25; “YKFP-Operations and Maintenance”, Project #97-017-25; and “YKFP-Design and Construction”, Project #88-115-25 for further information regarding the Project’s technical/science background.

b. Rationale and significance to Regional Programs

The Yakima/Klickitat Fisheries Project was identified in the 1982 Columbia River Basin Fish and Wildlife Program (Measure 704(i)(3) and 904(e)(1). A draft Master Plan was presented to the Northwest Power Planning Council in 1987 and the Preliminary Design Report in 1990. In both cases the NPPC instructed the managers (YIN and WDFW) to carry out planning functions that addressed uncertainties in regard to the adequacy of supplementation in the areas of meeting production objectives and limiting adverse ecological and genetic impacts. At the same time, the Council underscored the importance of adaptive management of the project. Therefore, management of the Project and its critical facilities are a key component of achieving the objectives and goals of the Project. The YKFP is unique in having been designed to rigorously test the efficacy of supplementation.

c. Relationships to other projects

This *sub-proposal* and the following three other *sub-proposals* comprise the component projects of the Yakima/Klickitat Fisheries Project *Umbrella* project:

Project 9701725, “YKFP Operations and Maintenance”

Project 8811525 “YKFP Design and Construction”

Project 9506325, “YKFP Monitoring and Evaluation”

This Management *sub-proposal* is necessary for the implementation of YKFP’s activities being undertaken by YIN and WDFW.

Ten additional NPPC Fish and Wildlife Program habitat improvement projects in the Yakima subbasin relate to this project as they will influence the quality of the environment the fish encounter. Projects 5510200, “Yakima River Basin Side Channel Survey and Rehabilitation”. These projects attempt to correct one of the most serious environmental problems in the upper Yakima: the lack of fry rearing habitat provided by side channels. Projects 5511300, 5511600, and 5511700 are intended to accomplish the same thing in other portions of the Yakima Subbasin. Projects 5510800 (“Upper Yakima Tributary Irrigation Improvement”) and 5510900 (“Teaaway River Instream Flow Restoration”) both attempt to restore adult and juvenile passage to upper Yakima tributaries dewatered or blocked by irrigation diversions. The Teaaway project is especially important because an acclimation site will be located on the North Fork of the Teaaway River. Finally, projects 9105700, 9107500, 9209900 and 9503300 provide funds for the WDFW Yakima screen shop and the Yakima Project Office of the Bureau of Reclamation (BOR) to build and maintain screens on irrigation diversions and to maintain fisheries monitoring and enhancement facilities (fish ladders, the Chandler and Roza smolt traps, the Roza adult trap, etc.) owned by the BOR.

d. Project history (for ongoing projects)

The YKFP’s management program was instituted concurrently with its authorization in 1982. However, the current management structure was not formally instituted until 1988. In the early years, YIN and WDFW participated in YKFP management decisions, but did not have decision-making authority. Such authority was reserved unto the BPA’s Fish And Wildlife Program management. From 1994 to the present, the YIN and WDFW’s management authority was brought on-line. Project decision-making authority is now exclusively contained within the YKFP’s Policy Group, which is comprised of one representative each from the YIN and WDFW. BPA is responsible for funding Project activities and ensuring NEPA compliance.

Prior Project management project numbers are: #88-120-01, Yakima/Klickitat Fisheries Project Management – YIN; and #95-064, Yakima Fisheries Project Science/Management Services – WDFW.

The YKFP's history is also addressed in other YKFP *Umbrella* sections: YKFP-Monitoring and Evaluation *sub-proposal*; YKFP-Operations and Maintenance *sub-proposal*; and, YKFP-Design and Construction *sub-proposal*.

e. Proposal objectives

This Management, Data and Habitat *sub-proposal* describes the YKFP's management and administrative support requirements for Project operations in the Yakima and Klickitat River basins. Management and administrative support responsibilities are shared by the YIN and WDFW. The YKFP's Policy Group (comprised of YIN and WDFW representatives) and YIN/WDFW scientists are responsible for policy development and planning. The Policy Group is also responsible for ensuring that all Project activities are implemented efficiently and effectively. YIN management and administrative personnel are directly responsible for implementing the YKFP's day-to-day operations, including the Project's O & M activities, M & E program, and new facility construction. Project operations are performed by a combination of YIN and WDFW personnel and sub-contractors (as required).

YIN management and administrative support objectives for the YKFP include:

1. Participate in the YKFP's Policy Group:
 - Develop Project policy and ensure implementation;
 - Participate in Project planning efforts, including the PAR and review of PSR's and URP, and ensure implementation;
2. Perform duties of Project's Lead Agency:
 - Manage, direct and ensure implementation of Project operations and activities;
 - Manage and direct all YIN management, administrative, science and technical personnel;
3. Develop a data base for Project data, information and documents, including employment of appropriate personnel;
4. Participate in all meetings affecting Project implementation, including those pertaining to water, habitat and fish passage issues;
5. Coordinate all environmental compliance activities with BPA and WDFW; and,
6. Manage and direct all sub-contractors providing services to the Project.

WDFW management and administrative support objectives for the YKFP include:

1. Participate in the YKFP's Policy Group:
 - Develop Project policy and ensure implementation;
 - Participate in Project planning efforts, including the PAR and review of PSR's and URP, and ensure implementation;
2. Manage and direct all WDFW management, administrative, science and technical personnel participating in Project activities;
3. Coordinate all environmental compliance activities with BPA and YIN; and,
4. Manage and direct all sub-contractors providing services to WDFW in support of the Project.

A more detailed description of YKFP management activities is provided below:

1. Develop and implement Project policy and planning functions and provide administrative support for YKFP.

Establish Policy: As a Project co-manager and its “Lead Agency”, the YIN will be represented by the Policy Advisory/Project Coordinator (PAPC) in Policy Group activities. The Policy Group, which consists of a representative from the Washington State Department of Fish and Wildlife (WDFW) and Yakama Indian Nation (YIN), is responsible for developing Project policy and plans. The PAPC will coordinate and schedule the Policy Group meetings of which the Bonneville Power Administration (BPA) participates through their designated Project Manager. All aspects of the YKFP, as noted in the YKFP’s *Umbrella* and *sub-proposals*, are coordinated through the Policy Group consistent with the YKFP’s governing documents (e.g. YIN/WDFW Memorandum of Understanding) and operational structure. Appropriate records are maintained for the Policy Group and its designated committees (e.g. STAC). Also, the implementation of Project goals and objectives requires coordination with existing entities and agencies. This coordination involves review, analysis and compliance with applicable statutes. The ability to adequately coordinate these elements will be achieved through personal service contracts for a Policy Analyst and consultant services for water, passage, and irrigation expertise.

Administrative Support: Through the previous experiences of the YKFP, the YIN has learned that adequate administrative support is absolutely essential to Project success. As various aspects of the Project are implemented and maintained, accountability for Project actions remains paramount. The Project must be financially accountable. It must also report its activities relative to the achievement of YKFP goals and objectives to BPA and the NPPC. The YKFP will assure that the support staff is adequate in all regards, including office assistants and bookkeepers which have a thorough understanding of the YIN administrative system and the YKFP.

2. Implement and Maintain a Data Information System for YKFP.

There exists a vast amount of data and information that has been developed over the previous years of YKFP operations and is still to be developed. The YKFP must maintain a comprehensive data information system to meet its objectives as well as the ability to provide the information to others. Through the employment of a qualified data manager, he/she will design and maintain an adequate data information system in cooperation with the PAPC and the Science Technical Advisory Committee. The data manager will also develop a five-year Information System Resource Plan for review and approval. This operation will be housed at the Nelson Springs facility.

3. Coordinate a planning process through the YKFP Policy Group, utilizing the concepts of adaptive management.

The YIN will coordinate with WDFW to assure that the Policy Group addresses the specific planning documents which govern Project actions: Project Management Plan; Planning Status Reports; Uncertain Resolution Plans and Annual Operation Plans. We

will employ the services of the Science Technical Advisory Committee (STAC) and appropriate personnel through personal services contract, if necessary.

4. Plan/Facilitate Project Annual Review (PAR).

Through the Policy Group, the PAPC will coordinate planning for the PAR, utilizing the services of the STAC and other Project personnel. Peer Review of the YKFP will be attained through contracting with pre-designated scientists who will submit their observations and recommendations upon the completion of the PAR. The reviews will be analyzed and recommendations for future adoption into Project operations will be made to the Policy Group.

5. Coordinate the Services of a Science/Technical Advisory Committee (STAC).

The coordination of the STAC will be achieved through the Policy Group. STAC will have the immediate responsibility for reviewing all technical/scientific information for the YKFP. The YIN's Research Manager and a WDFW representative will represent co-managers on the STAC. They may contract for additional needed expertise or establish task specific committees. STAC has the immediate over-sight responsibility for: Planning Status Reports, Uncertainty Resolution Plans and Annual Operations Plans. They will formulate and forward recommendations to the Policy Group for review and consideration on an annual basis and as needed.

6. Coordinate water and habitat planning/development initiatives by various agencies, groups and committees in the Yakima and Klickitat Subbasins.

There exists a multitude of initiatives with numerous agencies, local governments, irrigation districts and groups on water and habitat issues. The YIN will hire additional personnel and/or contract for services to coordinate with these respective groups on all matters pertaining to habitat, water and fish passage matters within Yakima and Klickitat subbasins. These initiatives will be coordinated through the PAPC. They will include but not be limited to: Yakima Basin Technical Advisory Group; Phase 1& 2 screens within Yakima Basin; Yakima Basin Fish Passage Technical Work Group; and, coordination relative to the implementation of Title XII, P.L. 103-434. These services will be extended to the Klickitat River Basin consistent with current YKFP initiatives in that subbasin. There will be status reports on all relative matters with reference made to the Policy Group on policy issues.

f. Methods

The scientific and technical methods of the YKFP are completely covered in other areas of this Umbrella proposal. Specifically, Project #95-063-25, YKFP Monitoring and Evaluation and Project #97-017-25, Operations and Maintenance.

YKFP management activities covered by this *sub-proposal* operate under the administrative structure of the YIN. The YKFP is incorporated under the Division of Natural Resources which has a Deputy Director that has oversight responsibility. The following YIN administration support services are utilized: Central Accounting, Payroll, Audit, and Grants and Contracts. The Yakama Nation Tribal Council, by and through its Personnel, Law & Order, Fish and Wildlife Committee, has jurisdictional oversight with regard to the actions of the YIN relative to the YKFP.

The Policy responsibilities and immediate Project oversight is designated to the YIN's Policy Advisor/Project Coordinator (PAPC). Under the Umbrella of the YIN, the PAPC represents the YIN on all matters relative to the YKFP. The PAPC receives policy and administrative direction from the DNR Deputy Director and/or the Tribal Council Fish and Wildlife Committee.

The YKFP operates under the direction of its co-managers, with the YIN and WDFW having representation on the Policy Group. Decisions are made on a consensus basis. The YIN, consistent with its Memorandum of Understanding with WDFW, addresses the co-management arrangement and specifies the operations format for the YKFP on various matters.

The YKFP utilizes adaptive management in its operations. The Policy Group, which is responsible for developing Project Policy, meets on a scheduled basis to address the issues and needs of the YKFP. The PAPC for the YIN coordinates the Policy Group meetings, which includes development of the agenda. All Project operations are reviewed by Policy Group for the YKFP. The Lead Agency is responsible for the Project's day-to-day operations.

With the Policy Group providing policy direction to the Lead Agency with regard to Project operations, the YIN operates and maintains all Project facilities. The Lead Agency is ultimately responsible for implementing Project policy, and managing and directing all Project activities

The status of all Project activities will be addressed consistent with the report requirements that will be formulated in the contract procedures with BPA.

g. Facilities and equipment

All facilities and equipment necessary for Project management and administration are provided by the YIN.

h. Budget

The YKFP, in CY 1999 is converting the previous operating and funding format to NPPC's *Umbrella* concept. There will be four components under the YKFP's *Umbrella*: YKFP-Management, Data and Habitat *sub-proposal*, Project #88-120-25; Monitoring and Evaluation *sub-proposal*, Project #95-063-25; YKFP-Operations and Maintenance *sub-proposal*, Project #88-115-25; and the Design and Construction *sub-proposal*, Project # 8811525. Starting in 1999 and thereafter, the YKFP will submit four contract proposals in lieu of the previous multi-task order submissions.

Section 9. Key personnel

Name (alphabetically)	Title	Agency	FTE (mos.)	Expertise/Role
David Fast	Research Manager	YIN	12	Science and Technical Advisory Team; supervision of all YIN research.
Mel Sampson	Policy Advisor-Project Coordinator	YIN	12	YIN Project Coordinator for the entire YKFP
Data Manager Position	Currently Vacant	YIN	12	

Melvin R. Sampson
370 N. Brown Rd
Wapato, WA 98951

Work Experience

2/93-Present: Policy Advisor/Project Coordinator; Yakima/Klickitat Fisheries Project
Yakama Indian Nation's Policy representative with coordination responsibilities for the YKFP.
1989-1992: Private business; Petroleum and Convenience Store.
1985-1989: Chairman, Yakama Tribal Council
1971-1989: Elected and served on Yakama Tribal Council
1971: Yakama Indian Nation; Tribal Planner
1969-1970: Assistant Manager/Personnel Manager; Wholesale Furniture Manufacturer
1968-1969: Resident Counselor; Fort Simco Job Corps
1967-1968: Manager Trainee; Wholesale Furniture Manufacture
1965-1967: Industrial injury; Not employed
1961-1965: College student: Full time employee lumber planner mill; Longview, WA.
1959-1961: Active service; U.S. Army
1956-1959: Fisherman (Celilo); Boeing Aircraft; Construction; Farm Labor

Education

White Swan High School, graduate 1956
Lower Columbia College; Associate Degree, 1963
Lower Columbia College, Business Major
Central Washington State College; Major; Sociology, Minor; Psychology, Business
American Indian Management Institute, Albuquerque, NM; Tribal Executive Development

Military Experience

1959-1965: Veteran, U.S. Army, Honorable Discharge, Sgt. E-5.

Hobbies and Interests

Hunting, Fishing, Horses, Rodeo, Sports, Leather Crafts.

Personal Data

Date of Birth: April 20, 1938

Marital Status: Married, 5 daughters; 1 son

Enrolled member: Yakama Indian Nation

DAVID E. FAST

Fisheries Resource Management
P.O. Box 151
Toppenish, Washington 98948
Work: 509-966-5291

Education

University of Washington, Seattle, Washington
Doctor of Philosophy in Fisheries Science, 1987.
University of Puerto Rico, Mayaguez, Puerto Rico
Master of Science in Marine Sciences, 1974.
St. John's University, Collegeville, Minnesota
Bachelor of Science in Zoology, 1969.

Research Experience

1988-Present: Research Manager. Fisheries Resource Management Program, Yakima Indian Nation.

Responsible for the design, development, and implementation of a major supplementation and research facility to test the concept of using artificial production to rebuild natural spawning populations of spring chinook salmon in the Yakima Basin. Write detailed project plans, develop short and long-term project goals and objectives, and supervise professional and technical staff.

1985-1988: Project Leader. Spring Chinook Enhancement Study.

Responsible for research project designed to determine the best methods of enhancing the spring chinook salmon population in the Yakima Basin. Evaluate survival through various life stages and total production of naturally producing salmon. Determine methods of supplementation with hatchery reared fish while minimizing adverse genetic impacts.

Fast, D.E. 1987. The Behavior of salmonid alevins in response to light, velocity and dissolved oxygen during incubation.

Pages 84-92 in Salmonid Migration and Distribution Symposium (E.L. Brannon, ed.), School of Fisheries, University of Washington, and Directorate for Nature Management, Norway, Trondheim, Norway.

Fast, D.E., J.D. Hubble, T.B. Scribner, M.V. Johnston, W.R. Sharp.

1989. Yakima/Klickitat Natural Production and Enhancement Program. 1989 Annual Report to Bonneville Power Administration. Project 88-120. 107 pp.

Fast, D.E. 1989. Supplementation Strategies For The Yakima/Klickitat Production Facility. Pages 143-147 in Northwest Fish Culture Conference Proceedings (R.Z. Smith, ed.).

Fast, D.E., J.D. Hubble, M.S.Kohn, and B.D.Watson. 1991. Yakima River Spring Chinook Enhancement Study. Project Completion Report to Bonneville Power Administration. Project 82-16. Volume 1 - 345 pp. and Volume 2 (Appendices) 133 pp.

Section 10. Information/technology transfer

The technical information resulting from this project (and its component tasks) will be distributed in the following ways:

- A completion (annual) report will be submitted to Bonneville at the close of the fiscal (calendar) year and Bonneville will distribute copies to all individuals and agencies on its mailing list.
- Where appropriate, results from this project will be presented in papers in peer-reviewed journals and at professional meetings.
- Excerpted data will be appropriately formatted and submitted to the Northwest Aquatic Information Network (StreamNet) and made available to the public via the Internet.
- As an element of the YKFP, the objectives and findings of this project will also be entered into the YKFP home-page on the Internet. This home-page is currently under construction, and should be operational some time in 1998. The kind of information posted to the YKFP home-page will differ somewhat from that posted to StreamNet. Specifically, the YKFP Internet site will contain more detailed and site-specific information than that in StreamNet, which has a regional perspective and therefore aggregates data in standardized units of larger geographic scope. There will also be more different kinds of data posted to the YKFP site than can presently be accommodated by StreamNet.
- The results of this study will also be presented and critiqued in an annual workshop hosted by the YKFP, the "Project Annual Review". The Yakama Indian Nation can be contacted for abstracts of presentations made at this workshop.

Congratulations!